

ABSTRACT

An image sensor for capturing image, has: a plurality of pixels arranged in a matrix each including a photoelectric conversion element for generating current according to received light intensity and a reset transistor for resetting a node of the photoelectric conversion element to a reset potential; and a sample hold circuit for sample holding a pixel potential according to the potential of the node of the pixel. And the sample hold circuit outputs the differential potential, between a first pixel potential at an end of the integration period after a first reset operation of the pixel and a second pixel potential at an end of a reset noise read period after a second reset operation after the integration period, as a pixel signal. Also in the sample hold circuit, when the second pixel potential during the reset noise read period exceeds a predetermined threshold level, the second pixel potential is set to a predetermined reference potential.